



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,022	05/23/2000	Erik L. Wallace	20-430	4391
7590	10/22/2004		EXAMINER	
			BEAMER, TEMICA M	
			ART UNIT	PAPER NUMBER
			2681	
DATE MAILED: 10/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/576,022	WALLACE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Temica M. Beamer	2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 03 August 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-28 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, 6, 8, 11-15, 18-21 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berggren et al (Berggren), U.S. Patent No. 6,073,015 in view of Balachandran, U.S. Patent No. 6,073,004.

Regarding claim 1, Berggren discloses a mobile activity status tracker (48 or 52), comprising: a database relating to individual wireless device subscribers (col. 7, lines 5-29, col. 8, lines 45-55); a communications channel to allow entry of data into said database via a signaling transfer point (col. 8, lines 19-55); and a TCP/IP communications channel for communicating information contained in said database to at least one application server over at least one of an Internet and an Intranet (col. 4, lines 46-56, col. 10, line 42-col. 11, line 1).

Berggren, however, fails to disclose wherein the application server is user accessible to determine at least one of presence information and location information of a wireless device.

In a similar field of endeavor, Balachandran discloses wherein an emergency operator can obtain emergency and location information of a user from an HLR of the user (col. 3, lines 32-59).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Berggren with the teachings of Balachandran for the purpose of ensuring that a user in an emergency situation can be located.

Regarding claim 2, the combination of Berggren and Balachandran discloses the mobile activity status tracker according to claim 1, wherein: said communications channel utilizes a TCP/IP communications protocol (Berggren, col. 10, line 42-col. 11, line 1).

Regarding claim 5, the combination of Berggren and Balachandran discloses the mobile activity status tracker according to claim 1, wherein: said data entered into said database is previously forwarded by a Home Location Register (36) (col. 8, lines 19-55).

Regarding claim 6, the combination of Berggren and Balachandran discloses the mobile activity status tracker according to claim 5, wherein: said Home Location Register is one of a stand-alone Home 5 Location Register and an Integrated Home Location Register (HLR) (Berggren, figure 1).

Regarding claim 8, the combination of Berggren and Balachandran discloses the mobile activity status tracker the mobile activity status tracker according to claim 1,

wherein: said mobile activity status tracker is external to a Home Location Register servicing said individual wireless device subscribers (Berggren, figure 6).

Regarding claim 11, the combination of Berggren and Balachandran discloses the mobile activity status tracker according to claim 1, wherein: said mobile activity status tracker is adapted to compare a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device and overwrite an existing record with said temporary record if a change in activity status is determined (Berggren, col. 8, lines 45-55).

Regarding claim 12, the combination of Berggren and Balachandran discloses the mobile activity status tracker according to claim 11, wherein: said mobile activity status tracker is further adapted to forward relevant information relating to said determined changes in activity status to at least one relevant application server (Berggren, col. 8, line 30-col. 9, line 9).

Regarding claim 13, Berggren discloses a method of providing a database of presence or location information regarding wireless system subscribers, comprising: forwarding a registration notification message from a Home Location Register to a mobile activity status tracker (col. 8, lines 30-55); and transmitting at least one of presence and location information relating to at least one wireless system subscriber to at least one application server via at least one of an Internet and an Intranet (Berggren, col. 10, line 42-col. 11, line 1).

Berggren, however, fails to disclose wherein the application server is user accessible to determine at least one of presence information and location information of a wireless device.

In a similar field of endeavor, Balachandran discloses wherein an emergency operator can obtain emergency and location information of a user from an HLR of the user (col. 3, lines 32-59).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Berggren with the teachings of Balachandran for the purpose of ensuring that a user in an emergency situation can be located.

Regarding claim 14, the combination of Berggren and Balachandran discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claim 13, further comprising: comparing a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device; and at least one of overwriting an existing record with said temporary record if a change in activity status is determined and keeping a log of at least one of history of activity and registration for at least one wireless subscriber (Berggren, col. 8, lines 45-55).

Regarding claim 15, the combination of Berggren and Balachandran discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claim 14, wherein: said registration notification message is forwarded through a signaling transfer point between said Home Location Register and said mobile activity status tracker (Berggren, col. 8, lines 19-55).

Regarding claim 18, the combination of Berggren and Balachandran discloses the method of providing a database of presence and location information regarding wireless system subscribers according to claim 14, wherein: said Home Location Register is one of a stand-alone Home Location Register and an Integrated Home Location Register (HLR) (Berggren, figure 1).

Regarding claim 19, Berggren discloses an apparatus for providing a database of presence and location information regarding wireless system subscribers, comprising: means for forwarding a registration notification message from a Home Location Register to a mobile activity status tracker (col. 8, lines 30-55); and means for transmitting at least one of presence and location information relating to at least one wireless system subscriber to an application server via at least one of an Internet and an Intranet (Berggren, col. 10, line 42-col. 11, line 1).

Berggren, however, fails to disclose wherein the application server is user accessible to determine at least one of presence information and location information of a wireless device.

In a similar field of endeavor, Balachandran discloses wherein an emergency operator can obtain emergency and location information of a user from an HLR of the user (col. 3, lines 32-59).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Berggren with the teachings of Balachandran for the purpose of ensuring that a user in an emergency situation can be located.

Regarding claim 20, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 19, further comprising: means for comparing a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device; and means for overwriting an existing record with said temporary record if a change in activity status is determined (Berggren, col. 8, lines 45-55).

Regarding claim 21, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 20, wherein: said means for forwarding forwards said registration notification message through a signaling transfer point between said Home Location Register and said mobile activity status tracker (Berggren, col. 8, lines 19-55).

Regarding claim 24, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 20, wherein said Home Location Register is a stand-alone Home Location Register (Berggren, figure 1).

Regarding claim 25, Berggren discloses an apparatus for providing a database of presence and location information regarding wireless system subscribers, comprising: means for copying and forwarding to a mobile activity status tracker a registration notification message sent to a Home Location Register (col. 8, lines 30-55); and means for transmitting at least one of presence and location information relating to at least one

wireless system subscriber to an application server via at least one of an Internet and an Intranet (Berggren, col. 10, line 42-col. 11, line 1).

Berggren, however, fails to disclose wherein the application server is user accessible to determine at least one of presence information and location information of a wireless device.

In a similar field of endeavor, Balachandran discloses wherein an emergency operator can obtain emergency and location information of a user from an HLR of the user (col. 3, lines 32-59).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Berggren with the teachings of Balachandran for the purpose of ensuring that a user in an emergency situation can be located.

Regarding claim 26, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 25, further comprising: means for comparing a temporary record with entries in said database to determine any changes in activity status relating to a relevant wireless device; and means for overwriting an existing record with said temporary record if a change in activity status is determined (Berggren, col. 8, lines 45-55).

Regarding claim 27, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 26, wherein said means of copying and forwarding sends said copied registration notification message over a TCP/IP

connection to said mobile activity status tracker (Berggren, col. 8 lines 30-55, col. 10, line 42-col. 11, line 1).

4. Claims 3, 4, 7, 9, 10, 16, 17, 22, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berggren, Balachandran and further in view of Gossman et al (Gossman), U.S. Patent No. 6,181,935.

Regarding claims 3, 4, 9, 10, 16, 17, 22 and 23, the combination of Berggren and Balachandran discloses the mobile activity status tracker /method/apparatus of claims 1, 8, 14 and 20 as described above. The combination, however fails to disclose the protocol for transferring information between the communication systems in claims 3, 4, 9, 10, 16, 17, 22 and 23 as being Signaling System #7 (SS7) and IS-41 compliant.

In a similar field of endeavor, Gossman discloses a system, which enables seamless roaming for wireless subscribers with cooperation from various entities such as an HLR (col. 3, lines 30-53, col. 4, lines 1-12).

Gossman further discloses wherein communication between the various entities in the communication network utilize the SS7 protocol and is IS-41 compliant (col. 3, lines 62-67, col. 4, lines 17-22 and col. 11, lines 38-43).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Berggren and Balachandran with the teachings of Gossman since such protocols are well known in the art to interconnect mobile controllers to transfer data (Gossman, col. 62-67).

Regarding claim 7, the combination of Berggren and Balachandran discloses the mobile activity status tracker of claim 6 as described above. The combination, however, fails to disclose wherein the HLR is integrated with a message servicing center on a common platform.

Gossman discloses this limitation (col. 9, lines 55-65; figure 1).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Berggren and Balachandran with the teachings of Gossman since it is known in the art to integrate multiple systems into one. Such integration requires only routine skill in the art.

Regarding claim 28, the combination of Berggren and Balachandran discloses the apparatus for providing a database of presence and location information regarding wireless system subscribers according to claim 26 as described above and further discloses said means for copying and forwarding sends said copied registration notification message over a TCP/IP connection to said mobile activity status tracker (Berggren, col. 4, lines 46-56, col. 10, line 42-col. 11, line 1). The combination, however, fails to disclose wherein said registration notification message is sent to said HLR using the SS7 protocol.

Gossman discloses wherein communication between various entities in the communication network utilize the SS7 protocol (col. 3, lines 62-67, col. 4, lines 17-22 and col. 11, lines 38-43).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Berggren and Balachandran with the teachings of

Gossman since the SS7 protocol is very well known in the art to interconnect mobile controllers to transfer data (Gossman, col. 62-67).

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Temica M. Beamer  
Examiner  
Art Unit 2681

October 18, 2004

